

SYSTEM AND METHOD FOR THREE-DIMENSIONAL VIDEO CODING

ABSTRACT OF THE INVENTION

5 Systems and methods are provided for receiving and
encoding 3D video. The receiving method comprises: accepting a
bitstream with a current video frame encoded with two interlaced fields,
in a MPEG2, MPEG4, or H.264 standard; decoding a current frame top
field; decoding a current frame bottom field; and, presenting the decoded
10 top and bottom fields as a 3D frame image. In some aspects, the method
presents the decoded top and bottom fields as a stereo-view image. In
other aspects, the method accepts 2D selection commands in response to a
trigger such as receiving a supplemental enhancement information (SEI)
message, an analysis of display capabilities, manual selection, or receiver
15 system configuration. Then, only one of the current frame interlaced
fields is decoded, and a 2D frame image is presented.